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Applicants: Prasanna M. Shah, et al.

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For : SYSTEM AND METHOD FOR
SWITCHING SIGNALS OVER
TWISTED-PAIR WIRES

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Examiner: Unknown

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AMENDMENTS MADE BY REWRITING
THAT ARE MARKED-UP TO SHOW ALL CHANGES
RELATIVE TO THE PRIOR VERSION

In the Title

The title of the patent application has been amended as follows.

~~A SYSTEM AND METHOD CROSSPOINT SWITCH FOR SWITCHING ENCODED SIGNALS
OVER TWISTED PAIR CARRIED ON UNSHIELDED WIRES~~

In the Specification

A paragraph beginning on page 7 in line 15 has been amended as follows.

~~A method and system for switching signals over
conductors is disclosed. The method and system comprises
a plurality of encoders for receiving signals from a~~

plurality of sources. The system further comprises a crosspoint switching matrix is adapted for switching to at least one receiver selected from a plurality of receivers one encoded signal from among a plurality of encoded signals received from a plurality of encoders.

Each encoder is adapted for:

1. concurrently receiving a plurality of baseband signals from specific sources included among a plurality of sources; and
2. producing from the received signals a single encoded signal.

Each receiver is adapted for:

1. receiving the encoded signal;
2. decoding the encoded signal back into baseband format; and
3. providing a set of outputs corresponding to the baseband signals encoded into the received signal.

The crosspoint switching matrix means for includes a plurality of input nodes, each input node being adapted for accepting the encoded electronic signal produced by one of the encoders. The crosspoint switching matrix is capable of accepting the electronic signal from encoders which are directly coupled to the input node of the crosspoint switching matrix via a conductor, including an unshielded cable such as a twisted pair cable, which is

external to the crosspoint switching matrix. The crosspoint switching matrix also includes a plurality of output nodes, each output node being adapted for supplying receivers with encoded signals accepted by the input nodes. The crosspoint switching matrix is capable of supplying the electronic signal to receivers directly coupled to output nodes via a conductor, including an unshielded cable such as a twisted pair cable, which is external to the crosspoint switching matrix.

In an alternative embodiment the crosspoint switching matrix also includes a control system coupled to the crosspoint switching matrix. The control system is adapted for routing control signals from a remote control input to at least one source of baseband signals received by the encoders. The control signals travel from the remote control input in a direction opposite to a direction in which encoded signals travel from the crosspoint switching matrix to receivers. In this way the crosspoint switching matrix is adapted for concurrently:

1. receiving encoded signals from the plurality of encoders and for;
2. providing decoded signals received from the encoders to a plurality of receivers. The crosspoint switching matrix means in a pre-

~~ferred embodiment includes a control system for controlling multiple remote receivers; and~~

3. supplying control signals received from a remote control input to a source of baseband signals.

In the Abstract

The Abstract of the Disclosure has been amended as follows.

A method and system for switching signals over conductors is disclosed. The method and system comprises crosspoint switching matrix receives signals via unshielded cables from a plurality of encoders for receiving signals from a plurality of sources. The system further comprises a crosspoint switching matrix means for receiving encoded signals from the plurality of encoders and for providing decoded signals, and directs the signals via unshielded cables to a plurality of receivers. The Each encoder receives a plurality of baseband signals for encoding into a single encoded signal. Each receiver decodes the encoded signal from the crosspoint switching matrix means in a preferred embodiment includes a control system for controlling multiple remote receivers to baseband format, and provides a set of outputs corresponding to the baseband signals.